

IN THE CLAIMS:

Please amend claims 1, 4, 7, 10, 13, 14, 15 and 17, cancel claims 3, 9 and 16, and add new claims 25 and 26.

This listing of claims will replace all prior versions, and listings of the claims in the application.

Listing of the claims

1. **(Currently Amended)** A composition comprising:
 an isolated nucleic acid molecule that encodes an immunogen, wherein said immunogen is a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases; and
 an isolated nucleic acid molecule that encodes one or more proteins of selected from the group consisting of: Fos, c-jun, Sp-1, Ap-1, Ap-2, p38, p65Rel, MyD88, IRAK, TRAF6, Ikb, Inactive NIK, SAP K, SAP-1, JNK, interferon response genes, NFkB, Bax, TRAIL, TRAILrec, TRAILrecDRC5, TRAIL-R3, TRAIL-R4, RANK, RANK LIGAND, Ox40, ~~Ox40-LIGAND~~, NKG2D, MICA, MICB, NKG2A, NKG2B, NKG2C, NKG2E, NKG2F, TAP1, TAP2 and functional fragments thereof
 wherein nucleic acid sequences that encode the immunogen occur on a separate nucleic acid molecules from nucleic acid sequences that encode one or more immunomodulatory proteins.
2. **(Original)** The composition of claim 1 wherein said nucleic acid molecules are plasmids.
3. **(Canceled)**

4. **(Currently amended)** The composition of claim 3 1 wherein said immunogen is a pathogen antigen.

5. **(Original)** The composition of claim 4 wherein said immunogen is a herpes simplex antigen.

6. **(Original)** The composition of claim 5 wherein said herpes simplex antigen is HSV2gD.

7. **(Currently amended)** A composition comprising an isolated nucleic acid molecule comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements, wherein said immunogen is a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases; and in combination with a separate nucleotide sequence that encodes one or more immunomodulating proteins of operably linked to regulatory elements, wherein said immunomodulating proteins are selected from the group consisting of: Fos, c-jun, Sp-I, Ap-1, Ap-2, p38, p65Rel, MyD88, IRAK, TRAF6, Ikb, Inactive NIK, SAP K, SAP-1, INK, interferon response genes, NFkB, Bax, TRAIL, TRAILrec, TRAILrecDRC5, TRAIL-R3, TRAIL-R4, RANK, RANK LIGAND, Ox40, Ox40 LIGAND, NKG2D, MICA, MICB, NKG2A, NKG2B, NKG2C, NKG2E, NKG2F, TAP1, TAP2 and functional fragments thereof.

8. **(Original)** The composition of claim 7 wherein said nucleic acid molecule is a plasmid.

9. **(Canceled)**

10. **(Currently amended)** The composition of claim 9 7 wherein said immunogen is a pathogen antigen.
11. **(Original)** The composition of claim 10 wherein said immunogen is a herpes simplex antigen.
12. **(Original)** The composition of claim 11 wherein said herpes simplex antigen is HSV2gD.
13. **(Currently amended)** An injectable pharmaceutical composition comprising the composition of ~~claims~~ claim 1.
14. **(Currently amended)** A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a composition of ~~claims~~ claim 1.
15. **(Currently amended)** A recombinant vaccine comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements, wherein said immunogen is a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases; and in combination with a separate, a nucleotide sequence that encodes one or more immunomodulating proteins of operably linked to regulatory elements, wherein said immunomodulating proteins are selected from the group consisting of: Fos, c-jun, Sp-1, Ap-1, Ap-2, p38, p65Rel, MyD88, IRAK, TRAF6, Ikb, Inactive NIK, SAP K, SAP-1, JNK, interferon response genes, NFkB, Bax, TRAIL, TRAILrec, TRAILrecDRC5, TRAIL-R3, TRAIL-R4, RANK, RANK LIGAND, Ox40, Ox40 LIGAND, NKG2D, MICA, MICB, NKG2A, NKG2B, NKG2C, NKG2E, NKG2F, TAP1, TAP2 and functional fragments thereof.
16. **(Canceled)**

17. **(Currently amended)** The recombinant vaccine of claim ~~16~~ 15 wherein said immunogen is a pathogen antigen.
18. **(Original)** The recombinant vaccine of claim 17 wherein said recombinant vaccine is a recombinant vaccinia vaccine.
19. **(Original)** A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a recombinant vaccine of claim 17.
20. – 21. **Canceled.**
22. **(Previously presented)** The composition of claim 1 wherein the isolated nucleic acid molecule that encodes one or more proteins encodes Ox40 or a functional fragment thereof..
23. **(Previously presented)** The composition of claim 7 wherein the isolated nucleic acid that encodes one or more proteins encodes Ox40 or a functional fragment thereof.
24. **(Previously presented)** The recombinant vaccine of claim 15 wherein the nucleotide sequence that encodes one or more proteins encode Ox40 or a functional fragment thereof.
25. **(New)** An injectable pharmaceutical composition comprising the composition of claim 7.
26. **(New)** A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a composition of claim 7.